FEB - 7 2014

510(k) Summary K133462

This 510(k) summary is being submitted in accordance with the requirements of the Safe Medical Devices Act (SMDA) and 21CFR § 807.92

Submitted by:	Aston Medical 19, rue Victor Grignard 42000 Saint-Etienne France
Contact Person:	Catherine Gloster, Regulatory Affairs Consultant Gloster Biomedical International 577 North Hope Ave Santa Barbara, CA 93110 - USA Phone: 805-679-1258 Fax : 805-682-1250 Email: c.gloster@GlosterBiomedical.com
Date Prepared:	December 9, 2013
Proprietary Name:	DUOCENTRIC® Reversed
Common Name:	Reverse shoulder prosthesis
Classification:	Class II, 21 CFR 888.3660 Shoulder joint metal/polymer semi-constrained cemented prosthesis KWS Class II, 21 CFR 888.3690 Shoulder joint humeral (hemi-shoulder) metallic uncemented prosthesis HSD
Predicate Devices:	**K103251** – Aston Medical, France – Duocentric® Reversed Shoulder Prosthesis – cleared 10/28/2011 **K091751** – Depuy Orthopaedic, Inc. USA – Depuy Delta Xtend Reverse Shoulder - cleared 7/14/2009

Device Description:

The Duocentric® Reversed shoulder prosthesis is a prosthesis that uses the biomechanical concepts of reverse shoulder arthroplasty as originally described by Paul Grammont.

The Duocentric® Reversed shoulder prosthesis is composed of a humeral stem, a humeral baseplate, a humeral insert, a gleonosphere (Duoglene), and a glenoid baseplate

already cleared under K103251. It also includes a "bail out head" for use during rare occasions during surgery to salvage the procedure.

The humeral insert is made of ultra-high-molecular-weight polyethylene (UHMWPE), while all other components are made of wrought high nitrogen stainless steel M30NW. The humeral stem is intended for cemented use unless coated with hydroxyapatite (HA). The glenoid baseplate is coated with a double coating of pure titanium and hydroxyapatite (Ti/HA), is intended for cementless use, and is fixated with wrought high nitrogen stainless steel screws. The device is provided sterile.

The HA and Ti/HA coatings conform to ASTM standards ASTM F1185, ASTM F1609, and ASTM F1580 and are performed by Medical Coating (Vault-en-Velin, FR) according to their Master File MAF-1633.

This submission includes an additional component, a bail out head. This additional component is included to provide a solution to the surgeon 1) when during the primary surgery, the glenoid bone stock appears to be insufficient to bear the implant of the glenoid components or 2) glenoid bone fracture occurs intra-operatively.

Indications for use and intended use:

Implantation of a joint prosthesis is to be considered only when all other surgical options have been carefully examined and found less appropriate.

The Duocentric® Reversed shoulder prosthesis is indicated for use in case of gross rotator cuff deficiency including when it is associated with osteoarthritis, revision of previous arthroplasty or complex fracture of the humerus (3 fragments or more) in an older population (e.g. 65 years of age or older).

The patient's joint must be anatomically and structurally suited to receive the selected implant(s), and a functional deltoid muscle is necessary to use the device.

The humeral stem is intended for use with cement when polished or without cement when coated with Hydroxyapatite. All other components are intended for cementless use only. The glenoid baseplate is intended for cementless application with the additional of three screws for fixation. It is coated with a double layer of pure Titanium and Hydroxyapatite on its posterior side.

The additional component bail out head is intended when, during primary surgery for the Duocentric® Reversed shoulder prosthesis 1) the glenoid bone stock appears to be insufficient to bear the implant of the glenoid components, or 2) the glenoid bone fractures intra-operatively.

Basis for substantial equivalence:

Duocentric® Reversed shoulder prosthesis is substantially equivalent in intended use and design principles, materials, dimensions, design, packaging, sterilization processes and

results of pre-clinical testing to the following predicate devices previously cleared by FDA:

- Aston Medical, Duocentric® Reversed shoulder prosthesis cleared under K103251
- Depuy Orthopaedic, Inc. USA, Delta Xtend Reverse Shoulder cleared under K091751

Performance Data:

An engineering analysis analyze the requirements for pre-clinical testing associated with the inclusion of the additional component. Testing results from K103251 remained applicable. The connection and material of the bail out head are the same as those of the humeral baseplate included in K103251. Also the predicate device Delta Xtend Reverse Shoulder cleared under K091751 (itself a predicate device to the original K103251), has similar specifications as the additional component included in this submission: it includes a bail out head (called CTA head). Any differences in technological characteristics between the subject and predicate devices do not raise new issues of safety or efficacy. Pre-clinical performance testing concluded that the Duocentric® Reversed shoulder finished product with its bail-out head met all predetermined specifications and are adequate for their intended use.

Clinical data were not required for this device.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
10903 New Hampshire Avenue
Document Control Center – WO66-G609
Silver Spring, MD 20993-0002

February 7, 2014

Aston Medical
% Ms. Catherine Gloster, MS, RAC
Gloster Biomedical International
Founder and Principal
577 North Hope Avenue
Santa Barbara, California 93110

Re: K133462
Trade/Device Name: Duocentric® Reversed Shoulder Prosthesis
Regulation Number: 21 CFR 888.3660
Regulation Name: Shoulder joint metal/polymer semi-constrained cemented prosthesis
Regulatory Class: Class II
Product Code: KWS, HSD
Dated: December 9, 2013
Received: December 11, 2013

Dear Ms. Gloster:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21

CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

Vincent J. Devlin -S

for
Mark N. Melkerson
Director
Division of Orthopedic Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

Indications for Use and Intended Use

510(k) K133462

Duocentric® Reversed shoulder prosthesis: Aston® Medical

The Duocentric® Reversed shoulder prosthesis is indicated for use in case of gross rotator cuff deficiency including when it is associated with osteoarthritis, revision of previous arthroplasty or complex fracture of the humerus (3 fragments or more) in an older population (e.g. 65 years of age or older).

The patient's joint must be anatomically and structurally suited to receive the selected implant(s), and a functional deltoid muscle is necessary to use the device.

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The additional component bail out head is intended when, during primary surgery for the Duocentric® Reversed shoulder prosthesis 1) the glenoid bone stock appears to be insufficient to bear the implant of the glenoid components, or 2) the glenoid bone fractures intra-operatively.

Prescription Use _X_____ (Part 21 CFR 801 Subpart D)	AND/OR	Over-The-Counter Use _____ (21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Casey L. Hanley, Ph.D.

Division of Orthopedic Devices